

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KARLHEINZ BEYRICH, LUTZ ENDERLEIN,
ARNDT GOLDHAHN, and UWE KLIMMT

Appeal 2006-2259
Application 10/089,705
Technology Center 3700

Decided: January 11, 2007

Before BRADLEY R. GARRIS, CHUNG K. PAK,
and CHARLES F. WARREN, *Administrative Patent Judges*.
GARRIS, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal involves claims 1-11, the only claims pending in this application. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 134.

We AFFIRM.

INTRODUCTION

The claims are directed to an apparatus for transferring membranes to a continuously operable sealing carousel for the heat sealing of can-like packaging materials and a method for using the apparatus. Claims 1 and 10 are illustrative:

1. An apparatus for transferring membranes to a continuously operable sealing carousel for the heat sealing of can-like packaging materials, comprising a rotatable transfer station being disposed upstream of the sealing carousel, the transfer station being constructed as a cyclically drivable membrane star, and a cutting tool for membrane-strip processing being disposed above the membrane star for effecting transfer of cut-out membranes from the membrane strip to the membrane star during resting phases of the membrane star and for effecting advancement of membranes positioned on the membrane star to the sealing carousel during movement phases of the membrane star.

10. A method for transferring membranes to a continuously operable sealing carousel for heat sealing of can-like packaging materials, the method which comprises:

placing a rotatable transfer station constructed as a cyclically drivable membrane star upstream of the sealing carousel;

placing a cutting tool above the membrane star and cutting membranes from membrane-strip with the cutting tool;

transferring cut-out membranes from the membrane strip to the membrane star during resting phases of the membrane star; and

advancing the cut-out membranes to the sealing carousel during movement phases of the membrane star.

The Examiner relies on the following prior art references as evidence of unpatentability:

Foldesi (Foldesi '463)	US 4,682,463	Jul. 28, 1987
Foldesi (Foldesi '739)	US 4,719,739	Jan. 19, 1988

The rejections as presented by the Examiner are as follows:

1. Claims 1-4 and 8-11 are rejected under 35 U.S.C. § 102(b) as unpatentable over Foldesi '739.
2. Claims 5-7 are rejected under 35 U.S.C. § 103(a) as unpatentable over Foldesi '739 in view of Foldesi '463.

Rather than reiterate the respective positions advocated by the Appellants and by the Examiner concerning these rejections, we refer to the Brief and to the Answer, respectively, for a complete exposition thereof.

Claims 1 and 10 are argued separately by Appellants. We address these claims in our opinion below.

OPINION

35 U.S.C. § 102(b) REJECTION

The Examiner rejected claims 1-4 and 8-11 under § 102(b) over Foldesi '739 (Answer 3). The Examiner found that the reference's "membranes [i.e., sealing disks] 26 are carried through membrane star wheel (cam 90; follower 86; drive hub 52; vacuum heads 80) to containers on [sealing] star wheel 48" (Answer 3). The Examiner also determined that the "membranes [i.e., sealing disks] 26 are transferred to the membrane star [wheel] [i.e., the "star wheel" composed of cam 90, follower 86, drive hub 52, vacuum heads 80] during a dwell or resting period and then advanced to the sealing carrousel [i.e., sealing star wheel] 48 during a movement phase of the [membrane] star wheel" (Answer 3).

Appellants argue that the Examiner's finding that the membranes (i.e., sealing disks 26) are advanced to the sealing carrousel (i.e., sealing star wheel 48) during movement phase of the star wheel is not correct (Br. 8). Specifically, Appellants argue that the membranes (i.e., sealing disks) 26 are transferred to a vacuum head 80 and then placed directly on the unsealed

containers 20 without the membranes (i.e., sealing disks 26) ever being “transferred to the star wheel 48” (Br. 8).

In view of this deficiency, according to Appellants, the membranes (i.e., sealing disks 26) cannot be “advanced . . . during a movement phase of the star wheel” as is required by the claims (Br. 8). In this regard, Appellants further argue that Foldesi ‘739 discloses that the vacuum heads 80 necessarily must dwell for a moment above the uppermost sealing disk 26 (i.e., membrane) at the supply point 14 so that the disk (i.e., membrane) 26 will be properly aligned (Br. 10). Based on this argument, Appellants conclude that Foldesi ‘739 “**does not** disclose effecting advancement of membranes positioned on the membrane star to the sealing carrousel **during movement phases** of the membrane star” as the claims require (Br. 10; emphasis original).

Appellants also argue that Foldesi ‘739 “does not show a rotatable transfer station being disposed upstream of the sealing carrousel, the transfer station being constructed as a cyclically drivable membrane star, as recited in claims 1 and 10” (Br. 9). Appellants contend that Foldesi ‘739 discloses a vacuum head being disposed directly above a corresponding pocket in the sealer star wheel (48) that accepts the cut membrane (i.e., sealing disk 26) and transfers the membrane (i.e., sealing disk) directly to the unsealed container 20 (Br. 9). Appellants argue that this direct transfer of the sealing disks (i.e., membranes) to the unsealed container by the vacuum head indicates that Foldesi ‘739 does not disclose a drivable membrane star disposed upstream of the sealing carrousel (Br. 9).

The Examiner responds that Foldesi ‘739 has an “upper membrane star” with drive hub 52 which vacuum heads 80 are mounted upon

(Answer 4). The Examiner contends that cut membranes (i.e., sealing disks 26) are transferred by the vacuum heads 80 of the “upper membrane star” to “a downstream sealing station during a movement phase of the membrane star” (Answer 4). The Examiner states that the “upper membrane star” transfers the membranes (i.e., sealing disks) to the unsealed containers 20 positioned within the pockets 46 of the sealing carrousel (i.e., sealing star wheel) 48 (Answer 4).

The Examiner further responds that Foldesi ‘739 anticipates the claim feature of “advancing membranes to the sealing carrousel during a movement phase” (Answer 5). The Examiner contends that the membrane star (i.e., “upper membrane star” consisting of vacuum heads 80; cam 90; follower 86; drive hub 52) advances the cut membranes (i.e., sealing disks 26) from a pick-up station to sealing station via rotational movement of the “upper membrane star” (Answer 5).

We have considered all of Appellants’ arguments and find them unpersuasive. We agree with the Examiner’s finding that the claims under review are anticipated by Foldesi ‘739.

Appellants’ sole arguments are directed to the following two distinctions over Foldesi ‘739: (1) Foldesi ‘739 fails to teach a rotatable transfer station upstream from the sealing carrousel, the transfer station being constructed as a cyclically drivable membrane star, and (2) Foldesi ‘739 fails to disclose the sealing disks 26 (i.e., membranes) are transferred to the sealing carrousel during the movement phase of the membrane star.

As best shown by Figure 2, Foldesi ‘739 discloses a cyclically driven “membrane star” comprising, among other parts, vacuum head 80, vacuum head position arm 56, and vacuum head drive hub 52

(Foldesi '739 col. 4, ll. 38-68; col. 5, ll. 1-25). This “membrane star” serves to receive and transfer the cut sealing disks 26 (i.e., membranes) produced by punch 132 (Figure 2, ref. nos. 142 and 140, and Figure 6). The sealing disks 26 (i.e., membranes) are rotatably transferred via the “membrane star” to the containers 20 positioned on the sealing star wheel (i.e., sealing carrousel) 48.

Contrary to Appellants’ two argued distinctions, we observe that, tracing the flow of the sealing disks 26 (i.e., membranes) through the apparatus, the “membrane star” (i.e., the transport device composed of vacuum head 80, vacuum position arm 56, vacuum head drive hub 52) is positioned upstream of the sealing star wheel (i.e., sealing carrousel) 48. That is, the “membrane star” receives the sealing disks 26 (i.e., membranes) from the punch 132 and rotatably transfers them downstream to the sealing star wheel (i.e., sealing carrousel) 48 during the movement phase of the “membrane star” (Foldesi '739 col. 5, ll. 4-25, 52-68).

We observe Appellants to be arguing that the claimed “membrane star” for transferring the membranes should be construed as the reference’s sealing star wheel 48. However, the Examiner makes clear in his office actions that he construes Foldesi '739 as disclosing “(cam 90; follower 86; drive hub 52; vacuum heads 80)” to be the “membrane star” (Answer 3). We find the Examiner’s claim interpretation of “membrane star” to be reasonable and consistent with Appellants’ specification. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316, 75 USPQ2d 1321, 1329 (Fed. Cir. 2005).

For the above indicated reasons, we affirm the Examiner’s rejection of claims 1-4 and 8-11 over Foldesi '739.

35 U.S.C. § 103(a) REJECTION

The Examiner rejected claims 5-7 under § 103(a) over Foldesi '739 in view of Foldesi '463.

Appellants have indicated that dependent claim 5-7 stand or fall with our determination of the patentability of claim 1 (Br. 6). We have affirmed the Examiner's rejection of claim 1. Accordingly, the § 103(a) rejection of claims 5-7 is affirmed.

CONCLUSION

We have affirmed the § 102(b) rejection of claims 1-4 and 8-11 over Foldesi '739.

We have affirmed the § 103(a) rejection of claims 5-7 over Foldesi '739 in view of Foldesi '463.

The Examiner's decision is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv)(2006).

AFFIRMED

clj

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